

## Decline in Major Bacterial FoodBorne Illnesses in the United States: FoodNet, 1996-2001

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**Background:** Foodborne illnesses are a major public health burden in the United States. National Health Objectives for 2010 target specific goals for reduction in those diseases.

**Methods:** Since 1996, CDC's Emerging Infections Program Foodborne Diseases Active Surveillance Network (FoodNet) has collected data on seven bacterial foodborne diseases in U.S. sites. Crude site- and age-specific incidence rates were calculated. To account for the increased population and variation in incidence among sites, a log linear Poisson regression model was used to estimate the effect of time on incidence. The relative change in incidence rates during 1996-2001 was estimated.

**Results:** During 2001, a total of 13,705 laboratory-diagnosed cases of 10 foodborne diseases were identified in a population of 37,817,351: 5,198 cases of *Salmonella* infection, 4,740 *Campylobacter*, 2,201 *Shigella*, 574 *Cryptosporidium*, 565 *E. coli* O157, 145 *Yersinia*, 94 *Listeria*, 80 *Vibrio*, 32 *Cyclospora*, and 76 of hemolytic uremic syndrome (HUS). Substantial variations in incidence were reported among sites. In addition, crude incidence for foodborne diseases varied by age: infants and young children had the highest incidence of most diseases. During 1996-2001, the estimated incidence of *Yersinia* infections decreased 49% (95% CI=35% to 60% decrease), *Listeria* decreased 35% (95% CI=9% to 53% decrease), *Campylobacter* decreased 27% (95% CI=19% to 35% decrease), *Salmonella* decreased 15% (95% CI=7% to 22% decrease), and *E. coli* O157 decreased 21% (95% CI=41% decrease to 5% increase). During 1997-2001, the incidence of *Cryptosporidium* cases decreased 33% (95% CI=4% to 53% decrease).

**Conclusion:** During 1996-2001, incidence of infections caused by *Yersinia*, *Listeria*, *Campylobacter* and *Salmonella* have shown substantial and sustained decline, evidence of important progress towards the National Health Objectives. These declines occurred in the context of several control measures including the implementation by the USDA Pathogen Reduction/Hazard Analysis Critical Control Point (HACCP) systems. However, additional measures will be needed to further reduce the incidence of those diseases.

### Suggested citation:

Charles L, Molbak K, Hedler J, Jones T, Vugia D, Smith K, Hawkins M, Shillam P, Cieslak P, Segler S, Angulo F, and The EIP FoodNet Working Group. Decline in Major Bacterial FoodBorne Illnesses in the United States: FoodNet, 1996-2001. Infectious Diseases Society of America. Chicago, IL, October 2002.